



MATERIAL SAFETY DATA SHEET

Section 1: Product & Company Identification

Product Name: HydroForce® All-Purpose Degreaser (Aerosol)

Product Number (s): 14406

Product Use: General purpose degreaser

Manufacturer / Supplier Contact Information:

In United States:

CRC Industries, Inc.

885 Louis Drive

Warminster, PA 18974

www.crcindustries.com

1-215-674-4300 (General)

(800) 521-3168 (Technical)

(800) 272-4620 (Customer Service)

In Canada:

CRC Canada Co.

2-1246 Lorimar Drive

Mississauga, Ontario L5S 1R2

www.crc-canada.ca

1-905-670-2291

In Mexico:

CRC Industries Mexico

Av. Benito Juárez 4055 G

Colonia Orquídea

San Luís Potosí, SLP CP 78394

www.crc-mexico.com

52-444-824-1666

24-Hr Emergency – CHEMTREC: (800) 424-9300 or (703) 527-3887

Section 2: Hazards Identification

Emergency Overview

CAUTION: May Cause Eye Irritation. Contents Under Pressure

Appearance & Odor: Clear yellow liquid, pleasant odor

Potential Health Effects:

ACUTE EFFECTS:

EYE: May cause mild irritation to the eyes.

SKIN: No acute effects expected. However, prolonged contact may cause mild irritation.

INHALATION: No health effects expected under normal conditions of use. Extended exposure to vapors may cause irritation of nasal passages or throat or headache.

INGESTION: Generally non-toxic if ingested in small amounts. May cause vomiting, diarrhea or gastrointestinal discomfort.

CHRONIC EFFECTS: None known

TARGET ORGANS: None known

Medical Conditions Aggravated by Exposure: Unknown

See Section 11 for toxicology and carcinogenicity information on product ingredients.

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Section 3: Composition/Information on Ingredients

COMPONENT	CAS NUMBER	% by Wt.
Water	7732-18-5	75 - 85
Surfactant	Proprietary mixture	5 - 10
Dipropylene glycol monomethyl ether	34590-94-8	2 - 5
Trisodium citrate dihydrate	6132-04-3	2 - 5
Liquefied petroleum gas	68476-86-8	3 - 8

Section 4: First Aid Measures

Eye Contact: Immediately flush with plenty of water for 15 minutes. Call a physician if irritation persists.

Skin Contact: Remove contaminated clothing and wash affected area with soap and water. Call a physician if irritation persists. Wash contaminated clothing prior to re-use.

Inhalation: Remove person to fresh air. Keep person calm. If not breathing, give artificial respiration. If breathing is difficult give oxygen. Call a physician.

Ingestion: If swallowed, do NOT induce vomiting. Give victim a glass of water. If severe symptoms develop, get medical attention immediately.

Note to Physicians: None

Section 5: Fire-Fighting Measures

Flammable Properties: This product is nonflammable in accordance with aerosol flammability definitions. (See 16 CFR 1500.3(c)(6)).

Flash Point: None (TCC)

Autoignition Temperature: None

Upper Explosive Limit: None

Lower Explosive Limit: None

Fire and Explosion Data:

Suitable Extinguishing Media: This material will not burn. Use extinguishing media appropriate for the surrounding fire.

Products of Combustion: If heated, product may produce carbon oxides and nitrogen oxides.

Explosion Hazards: Aerosol containers, when exposed to heat from fire, may build pressure and explode.

Protection of Fire-Fighters: Firefighters should wear self-contained, NIOSH-approved breathing apparatus for protection against suffocation and possible toxic decomposition products. Proper eye and skin protection should be provided. Use water spray to keep fire-exposed containers cool and to knock down vapors which may result from product decomposition.

Section 6: Accidental Release Measures

Personal Precautions: Use personal protection recommended in Section 8.

Environmental Precautions: Take precautions to prevent contamination of ground and surface waters.

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Methods for Containment & Clean-up: Dike area to contain spill. Ventilate the area with fresh air. If in confined space or limited air circulation area, clean-up workers should wear appropriate respiratory protection. Recover or absorb spilled material using an absorbent designed for chemical spills. Place used absorbents into proper waste containers.

Section 7: Handling and Storage

Handling Procedures: Avoid contact with eyes, skin and clothing. Use caution around energized equipment. The metal container will conduct electricity if it contacts a live source. This may result in injury to the user from electrical shock and/or flash fire. Wash hands after use and before handling food items. For product use instructions, please see the product label.

Storage Procedures: Store in a cool dry area out of direct sunlight. Aerosol cans must be maintained below 120 F to prevent cans from rupturing.

Aerosol Storage Level: I

Section 8: Exposure Controls/Personal Protection

Exposure Guidelines:

COMPONENT	OSHA		ACGIH		OTHER		UNIT
	TWA	STEL	TWA	STEL	TWA	SOURCE	
Water	NE	NE	NE	NE	NE		
Surfactant	NE	NE	NE	NE	NE		
Dipropylene glycol monomethyl ether	100	NE	100	150 (s)	NE		ppm
Trisodium citrate dihydrate	NE	NE	NE	NE	NE		
Liquefied petroleum gas	1000	NE	1000	NE	NE		ppm
N.E. – Not Established (c) – ceiling (s) – skin (v) – vacated							

Controls and Protection:

Engineering Controls: Area should have ventilation to provide fresh air. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at the source, preventing dispersion into the general work area. Use mechanical means if necessary to maintain vapor levels below the exposure guidelines. If working in a confined space, follow applicable OSHA regulations.

Respiratory Protection: None required for normal work where adequate ventilation is provided. Air monitoring is needed to determine actual employee exposure levels. Use a self-contained breathing apparatus in confined spaces and for emergencies.

Eye/face Protection: For normal conditions, wear safety glasses. Where there is reasonable probability of liquid contact, wear splash-proof goggles.

Skin Protection: Use protective gloves such as nitrile, neoprene or rubber if prolonged contact with cleaner is expected or if you have sensitive skin.

Section 9: Physical and Chemical Properties

Physical State: liquid
Color: clear yellow

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Odor: pleasant odor

Odor Threshold: ND

Specific Gravity: 1.038

Initial Boiling Point: 212°F

Freezing Point: ~ 32°F

Vapor Pressure: ND

Vapor Density: ND (air = 1)

Evaporation Rate: slow

Solubility: appreciable

Coefficient of water/oil distribution: ND

pH: 10.6

Volatile Organic Compounds: wt %: 9.2 g/L: 95.5 lbs./gal: 0.8

Section 10: Stability and Reactivity

Stability: Stable

Conditions to Avoid: Temperature extremes

Incompatible Materials: Strong oxidizers, acids

Hazardous Decomposition Products: Oxides of carbon, nitrogen

Possibility of Hazardous Reactions: No

Section 11: Toxicological Information

Long-term toxicological studies have not been conducted for this product. The following information is available for components of this product.

Acute Toxicity:

Component	Oral LD50 (rat)	Dermal LD50 (rabbit)	Inhalation LC50 (rat)
Water	> 90 mL/kg	No data	No data
Surfactant	No data	No data	No data
Dipropylene glycol monomethyl ether	5.5 mL/kg	10 mL/kg	No data
Trisodium citrate dihydrate	No data	No data	No data
Liquefied petroleum gas	No data	No data	No data

Chronic Toxicity:

Component	OSHA Carcinogen	IARC Carcinogen	NTP Carcinogen	Irritant	Sensitizer
Water	No	No	No	No	No
Surfactant	No	No	No	E (severe) / S (mild)	Unknown
Dipropylene glycol monomethyl ether	No	No	No	E & R (mild)	No
Trisodium citrate dihydrate	No	No	No	E (mild)	Unknown
Liquefied petroleum gas	No	No	No	No	No

E – Eye S – Skin R – Respiratory

Reproductive Toxicity: No information available

Teratogenicity: No information available

Mutagenicity: Surfactant: Non-mutagenic for bacteria and/or yeast.

Synergistic Effects: No information available

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Section 12: Ecological Information

Ecological studies have not been conducted for this product. The following information is available for components of this product.

Ecotoxicity: Trisodium citrate dihydrate - 48 Hr EC50 Daphnia magna: 5600 mg/L
Surfactant – 72 Hr EC50 Algae: 0.5 gm/L
Persistence / Degradability: Over 98% of the product ingredients are biodegradable
Bioaccumulation / Accumulation: No information available
Mobility in Environment: No information available

Section 13: Disposal Considerations

Waste Classification: The dispensed liquid product is not a RCRA hazardous waste. (See 40 CFR Part 261.20 – 261.33) Aerosol containers should be fully emptied and de-pressurized before disposal. Empty containers may be recycled.

All disposal activities must comply with federal, state, provincial and local regulations. Local regulations may be more stringent than state, provincial or national requirements.

Section 14: Transport Information

US DOT (ground): Consumer Commodity, ORM-D
ICAO/IATA (air): Consumer Commodity, ID8000, 9
IMO/IMDG (water): Aerosols, UN1950, 2.2, Limited Quantity
Special Provisions: None

Section 15: Regulatory Information

U.S. Federal Regulations:

Toxic Substances Control Act (TSCA):

All ingredients are either listed on the TSCA inventory or are exempt.

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA):

Reportable Quantities (RQ's) exist for the following ingredients: None

Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your Local Emergency Planning Committee.

Superfund Amendments Reauthorization Act (SARA) Title III:

Section 302 Extremely Hazardous Substances (EHS): None

Section 311/312 Hazard Categories:	Fire Hazard	No
	Reactive Hazard	No
	Release of Pressure	Yes
	Acute Health Hazard	No
	Chronic Health Hazard	No

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Section 313 Toxic Chemicals: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:
None

Clean Air Act:

Section 112 Hazardous Air Pollutants (HAPs): None

Occupational Safety and Health Administration (OSHA):

This product is regulated under the Hazard Communication Standard.

U.S. State Regulations:

California Safe Drinking Water and Toxic Enforcement Act (Prop 65):

This product may contain the following chemicals known to the state of California to cause cancer, birth defects or other reproductive harm: None

Consumer Products VOC Regulations: In states with Consumer Products VOC regulations, this product is compliant as a General Purpose Degreaser - aerosol.

State Right to Know:

New Jersey: 34590-94-8
Pennsylvania: 34590-94-8
Massachusetts: 34590-94-8
Rhode Island: 34590-94-8

Canadian Regulations:

Controlled Products Regulations:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

WHMIS Hazard Class: A, D2B

Canadian DSL Inventory: All ingredients are either listed on the DSL Inventory or are exempt.

European Union Regulations:

RoHS Compliance: This product is compliant with Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003. This product does not contain any of the restricted substances as listed in Article 4(1) of the RoHS Directive.

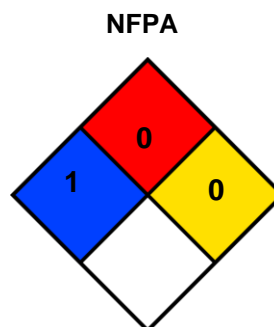
Additional Regulatory Information: None

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Section 16: Other Information

HMIS® (II)	
Health:	1
Flammability:	0
Reactivity:	0
PPE:	B



Ratings range from 0 (no hazard) to 4 (severe hazard)

Prepared By: Michelle Rudnick

CRC #: 424A

Revision Date: 12/16/2010

Changes since last revision: Formula change to reduce VOC content

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. This information is accurate to the best of CRC Industries' knowledge or obtained from sources believed by CRC to be accurate. Before using any product, read all warnings and directions on the label. For further clarification of any information contained on this MSDS consult your supervisor, a health & safety professional, or CRC Industries.

ACGIH: American Conference of Governmental Industrial Hygienists

CAS: Chemical Abstract Service

CFR: Code of Federal Regulations

DOT: Department of Transportation

DSL: Domestic Substance List

g/L: grams per Liter

HMIS: Hazardous Materials Identification System

IARC: International Agency for Research on Cancer

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

IMDG: International Maritime Dangerous Goods

IMO: International Maritime Organization

lbs./gal: pounds per gallon

LC: Lethal Concentration

LD: Lethal Dose

NA: Not Applicable

ND: Not Determined

NIOSH: National Institute of Occupational Safety & Health

NFPA: National Fire Protection Association

NTP: National Toxicology Program

OSHA: Occupational Safety and Health Administration

PMCC: Pensky-Martens Closed Cup

PPE: Personal Protection Equipment

ppm: Parts per Million

RoHS: Restriction of Hazardous Substances

STEL: Short Term Exposure Limit

TCC: Tag Closed Cup

TWA: Time Weighted Average

WHMIS: Workplace Hazardous Materials Information System